

FORM 1390 (REV. 12/2001) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTORNEY'S DOCKET NUMBER NREL 98-34CIP
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371		U.S. APPLICATION NO. (If known, see 37 CFR 1.5) 10/088760
INTERNATIONAL APPLICATION NO. PCT/US01/00430	INTERNATIONAL FILING DATE 21 JANUARY 2000	PRIORITY DATE CLAIMED 21 JANUARY 2000
TITLE OF INVENTION DIRECT PRINTING OF THIN-FILM CONDUCTORS USING METAL-CHELATE INK.		
APPLICANT(S) FOR DO/EO/US Douglas L. Schulz et al.		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
1. <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a filing under 35 U.S.C. 371. 2. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371. 3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. 4. <input type="checkbox"/> The US has been elected by the expiration of 19 months from the priority date (Article 3 I). 5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> has been communicated by the International Bureau. c. <input checked="" type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). 6. <input checked="" type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). a. <input type="checkbox"/> is attached hereto. b. <input checked="" type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4). 7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> have been communicated by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input checked="" type="checkbox"/> have not been made and will not be made 8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)). 9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). Items 11 to 20 below concern document(s) or information included: 11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. <input type="checkbox"/> A FIRST preliminary amendment. 14. <input type="checkbox"/> A SECOND or SUBSEQUENT preliminary amendment. 15. <input type="checkbox"/> A substitute specification. 16. <input type="checkbox"/> A change of power of attorney and/or address letter. 17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825. 18. <input type="checkbox"/> A second copy of the published international application under 35 U.S.C. 154(d)(4). 19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4). 20. <input checked="" type="checkbox"/> Other items or information:		
Post Card Receipt		

U.S. APPLICATION NO. 10/088760		INTERNATIONAL APPLICATION NO. PCT/US01/00430		ATTORNEY'S DOCKET NUMBER NREL 98-34CIP	
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<p>21. <input checked="" type="checkbox"/> The following fees are submitted:</p> <p>BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)):</p> <p>Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO ----- \$1000.00</p> <p>International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO ----- \$860.00</p> <p>International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO ----- \$710.00</p> <p>International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(l)-(4) ----- \$690.00</p> <p>International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(l)-(4) ----- \$100.00</p> <p style="text-align: center;">ENTER APPROPRIATE BASIC FEE AMOUNT</p> <p>Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 20%;">CLAIMS</th> <th style="width: 20%;">NUMBER FILED</th> <th style="width: 20%;">NUMBER EXTRA</th> <th style="width: 20%;">RATE</th> <th style="width: 20%;">\$</th> </tr> <tr> <td>Total claims</td> <td>25 -20 =</td> <td>5</td> <td>x \$18.00 9</td> <td>\$ 45.00</td> </tr> <tr> <td>Independent claims</td> <td>1 -3 =</td> <td>0</td> <td>x \$80.00 42</td> <td>\$</td> </tr> <tr> <td colspan="4">MULTIPLE DEPENDENT CLAIM(S) (if applicable)</td> <td>+ \$270.00</td> </tr> <tr> <td colspan="4">TOTAL OF ABOVE CALCULATIONS</td> <td>= \$ 145.00</td> </tr> </table> <p><input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.</p> <p style="text-align: right;">SUBTOTAL -</p> <p>Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).</p> <p style="text-align: right;">TOTAL NATIONAL FEE</p> <p>Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +</p> <p style="text-align: right;">TOTAL FEES ENCLOSED</p>	CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$	Total claims	25 -20 =	5	x \$18.00 9	\$ 45.00	Independent claims	1 -3 =	0	x \$80.00 42	\$	MULTIPLE DEPENDENT CLAIM(S) (if applicable)				+ \$270.00	TOTAL OF ABOVE CALCULATIONS				= \$ 145.00	<p style="text-align: center;">CALCULATIONS PTO USE ONLY</p> <p style="text-align: center;">\$ 100.00</p> <p style="text-align: center;">\$ 72.50</p> <p style="text-align: center;">\$ 72.50</p>
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$																						
Total claims	25 -20 =	5	x \$18.00 9	\$ 45.00																						
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TOTAL OF ABOVE CALCULATIONS				= \$ 145.00																						

<p>a. <input type="checkbox"/> A check in the amount of \$ _____ to cover the above fees is enclosed.</p> <p>b. <input checked="" type="checkbox"/> Please charge my Deposit Account No. <u>14-1460</u> in the amount of \$ <u>72.50</u> to cover the above fees. A duplicate copy of this sheet is enclosed.</p> <p>c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>14-1460</u>. A duplicate copy of this sheet is enclosed.</p> <p>d. <input type="checkbox"/> Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.</p>	<p style="text-align: center;">Amount to be refunded:</p> <p style="text-align: center;">charged:</p>
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NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

Paul J. White
National Renewable Energy Laboratory
1617 Cole Blvd.
Golden, CO 80401

SIGNATURE

Paul J. White
NAME

30.436
REGISTRATION NUMBER

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RE: International Patent Application of)
Midwest Research Institute)
International Application No.: PCT/US01/00430)
International Filing Date: 5 January 2000) Atty Docket No. NREL PCT/98-34CIP
Entitled: Direct Printing of Thin-Film Conductors)
Using Metal-Chelate Ink)

CERTIFICATE OF MAILING UNDER 37 CFR § 1.10

Express Mail Mailing Label No. EJ200220846US

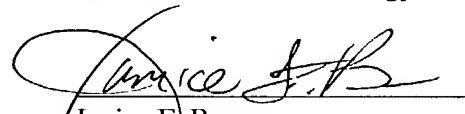
Date of Deposit 21 March 2002

I hereby certify that the following attached items:

- (1) Application [Specification 12 pgs, Claims 2 pgs, Abstract 1 pg]
- (2) 4 sheets of Drawings comprising Figure 1-4
- (3) Transmittal Letter to the United States Designated Elected Office (DO/EO/US) Concerning a Filing Under 35 USC 371 [2 pgs]
- (4) Combined Declaration and Power of Attorney [2 pgs]
- (5) Postcard receipt

have been deposited in the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and addressed to: The Assistant Commissioner for Patents, Box Patent Application, Washington, DC. 20231.

National Renewable Energy Laboratory


Janice F. Brown
Patent Administrator

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303/384-4799 (fax)